

### ABSTRACT OF THE DISCLOSURE

A method of molding and curing a tyre for a vehicle wheel includes building an unvulcanized tyre on a toroidal support; heating the support; pressing an inner surface of the tyre against an outer surface of the support; and pressing an outer surface of the tyre against walls of a molding cavity defined in a vulcanization mold. The inner surface of the tyre is pressed against the outer surface by at least one secondary working fluid. The outer surface of the tyre is pressed against the walls by at least one primary working fluid. The at least one primary working fluid is heated, causing vulcanization of the tyre. An apparatus for molding and curing a tyre for a vehicle wheel includes the vulcanization mold, at least one passage device, a feeding device, and first and second heating devices. It may also include an airtight device arranged to receive the support.